

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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# MULTIMEDIA UNIVERSITY

## FINAL EXAMINATION

TRIMESTER 1, 2017/2018

### MID 7133 – INSTRUCTIONAL SYSTEMS DESIGN (All sections / Groups)

09 OCTOBER 2017  
10.00 a.m. - 12.00 p.m.  
( 2 Hours )

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#### INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 6 pages including the cover page with 6 Questions only.
2. In **Section A**, answer **ALL** questions.  
In **Section B**, answer **TWO** out of **FOUR** questions. ALL questions carry equal marks.

**INSTRUCTION TO STUDENTS:**

You are required to answer **PART A** and **ONLY TWO (2)** questions from **PART B**. Please read the questions carefully and answer accordingly, supported with relevant examples where necessary.

**PART A [50 marks]**

Refer to the lesson on 'Recycling' to answer the following questions.

Refer to the following e-learning content below, and write a goal and one learning outcome for the lesson 'Recycling' and a specific topic. The LO must include the performance, condition and criteria. **[TOTAL MARKS: 10]**

**THE CONTENT****Why should you recycle?**

If you don't currently recycle, you may be wondering why you should bother. Does it really make that much of a difference? The answer is a resounding "Yes!" Here's why.

**Recycling reduces waste**

Landfills are filling up and we're running out of space to build new ones. The average American throws away 4.6 pounds of trash per day. That's almost twice the world average of 2.6 pounds.

An estimated 60% of trash in our landfills is made up of recyclable materials. That means that if everyone were to recycle we could potentially reduce waste and landfill space by 60%.

**Recycling saves energy**

When manufacturers use recycled materials to produce new products instead of raw materials, it takes less energy. How much less? In the case of aluminum cans, it takes 95% less energy when using recycled materials. That's nothing to shake your fist at!

**Recycling reduces carbon emissions**

Reducing energy also helps reduce carbon emissions. Not to mention for every ton of recycled paper used, 17 trees are saved. When you know that a single tree can remove up to 250 pounds of CO2 from the air every year, you can see how big a difference this makes!

**Recycling reduces water pollution**

Manufacturing goods from recycled materials generates significantly less water pollution. In addition, the toxic materials present in landfills can seep into groundwater, a major source of drinking water. The more landfills we have, the more likely the water is to be contaminated.

**Recycling helps preserve resources & protect wildlife**

By reusing recycled materials instead of raw materials, we reduce the need to destroy animal habitats, like forests for example.

1. Using the Gagne 9 Events of Instruction model as your guideline, prepare a storyboard for the learning outcome stated in Question 1. You are expected to produce 10 frames for a specific e-learning object. An example of a storyboard template is given below.

[TOTAL MARKS: 40]

<b>Page ID:</b> M01L01T01_01	<b>LESSON TITLE:</b>	<b>Page No:</b> 1/10
	<b>TOPIC:</b>	

<b>At the end of this topic you should be able to:</b>	<b><u>Text</u></b> <b>T1:</b> <b>T2:</b> <b>T3:</b>
<b><u>Graphic/animation/media:</u></b> <b>G1:</b> <b>G2:</b>	
<b><u>Interactive/Navigation features:</u></b>	<b><u>Dialogue/Narration:</u></b> <b>V01:</b> <b>V02:</b>

**PART B (50 marks)****Question 1**

Read the following scenario:

You are an educational technology director at a university and are assisting in the development of the university's technology plan. You want to determine the type of training that the lecturers' need to more effectively implement technology so that you can recommend and plan the yearly professional development.

- a) How might you plan a needs analysis and collect the data? (5 marks)
- b) Identify the possible gaps in the lecturers' performance in using technology for their teaching and learning. (5 marks)
- c) Create a fish bone diagram for the context given. (15 marks)

[Total marks: 25]

**Question 2**

Based on collaborative learning focus, explain the task and two processes needed for the e-learning WEBQUEST introduced below with its evaluation rubric.

**LESSON: EXPLORING THE GEOGRAPHY OF AFRICA****Introduction**

What other continent can you find the treasures of the Nile, fight the blazing heat of the Sahara Desert, and explore the tropical rainforests? Africa is a climate of diversity and beauty, home to a multitude of unique wildlife and resources. Africa is a continent which necessitates exploration of its varied regions to unravel the mysteries of its geography.

**Resources**

- Interactive map of Africa
- A website that explore the regions of Africa:  
[http://www.pbs.org/wnet/africa/explore/index\\_flash.html](http://www.pbs.org/wnet/africa/explore/index_flash.html)
- An African image bank: <http://www.africaimagery.com/>
- A learning object on African natural wonders
- A learning object on Africa's climate

**Evaluation Rubric:**

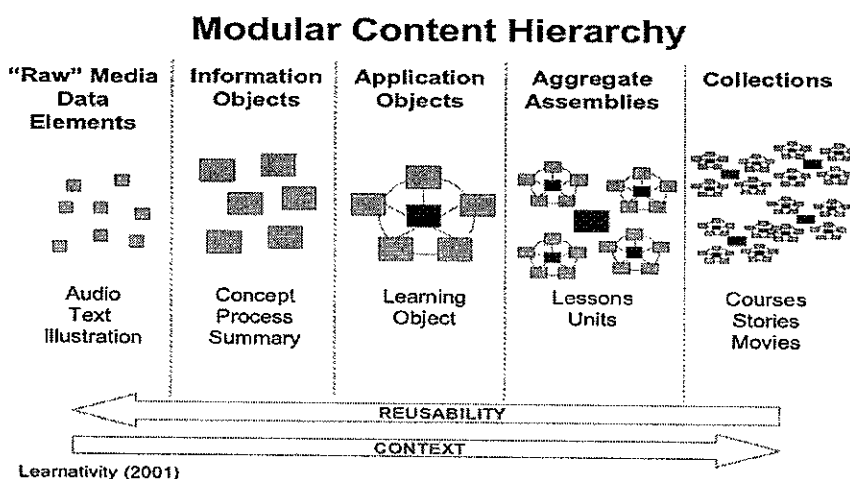
Beginning 1	Developing 2	Accomplished 3	Exemplary 4	Score
Using the Map as provided, the student correctly identified the geographical features listed.	Less than 80% of geographical features were correctly identified	80% of geographical features correctly identified	90% of geographical features correctly identified	All geographical features correctly identified
Using the Africa Imagery website, the student located relevant pictures.	The student found less than five pictures and only a few were relevant to the category and region.	The student found 5 pictures and most were relevant to category and region.	The student found 7 pictures and all were relevant to category and region.	The student found 9 pictures and all were relevant to category and region.
Using the PBS website and learning objects, the student identified facts that helped describe the region.	Less than 6 facts were identified with little relevance to the region	6-7 facts were identified, and some were relevant to the region	8-9 relevant facts were identified	10 or more relevant facts were identified

[Total marks: 25]

**Question 3**

Explain the characteristics of a learning object according to the diagram below

[Total marks: 25]



**Question 4**

Based on the two e-learning frames below, design an e-learning content using Merrill's Component Display Theory.

# Understanding ADDIE

The ADDIE model is one of the most commonly used instructional design models and is typically the go-to process most training designers use when crafting learning experiences.

The acronym stands for Analysis, Design, Development, Implementation, and Evaluation.

If you're designing training or e-learning, it's important that you have a solid grasp of what ADDIE means.

**Start**

**ANALYSIS**

**DESIGN**

**DEVELOPMENT**

**IMPLEMENTATION**

**EVALUATION**

Learn more about ADDIE by clicking on each phase.